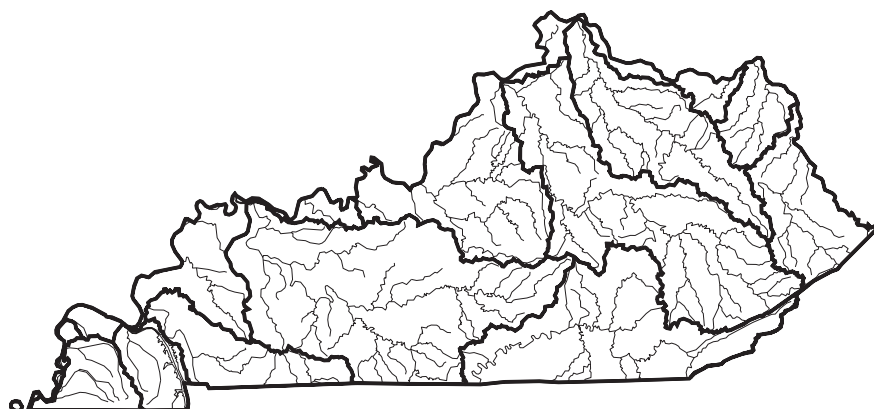


# Kentucky



— Basin Boundaries  
(USGS 6-Digit Hydrologic Unit)

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305(b) report, contact:

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## Surface Water Quality

About 75% of Kentucky's surveyed rivers (including the Ohio River) and 97% of surveyed lake acres have good water quality that fully supports aquatic life. Swimming use is fully supported in 100% of the surveyed lake acres, but 82% of the surveyed river miles do not fully support swimming due to elevated bacteria levels. Fecal coliform bacteria, siltation, and oxygen-depleting substances are the most common pollutants in Kentucky rivers. Sewage treatment facilities are still a leading source of fecal

coliform bacteria and oxygen-depleting substances, followed by agricultural runoff, septic tanks, and straight pipe discharges. Surface mining and agriculture are the major sources of siltation. Nutrients from agricultural runoff and septic tanks have the most widespread impacts on lakes.

Declining trends in chloride concentrations and nutrients provide evidence of improving water quality in Kentucky's rivers and streams. The State also lifted a swimming advisory on 76 miles of the North Fork Kentucky River, although the advisory remains in effect on 86 miles. Fish consumption advisories remain posted on three creeks for PCBs and on the Ohio River for PCBs and chlordane. The State issued advisories for the Green River Lake because of PCB spills from a gas pipeline compressor station and for five ponds on the West Kentucky Wildlife Management Area because of mercury contamination from unknown sources.

## Ground Water Quality

Ambient ground water monitoring at 70 sites statewide was begun in 1995. Underground storage tanks, septic tanks, abandoned hazardous waste sites, agricultural activities, and landfills are estimated to be the top five sources of ground water contamination in Kentucky. Bacteria is the major pollutant in ground water. The State is concerned about the lack of ground water data, absence of ground water regulations, and the potential for ground water pollution in karst regions of the State.

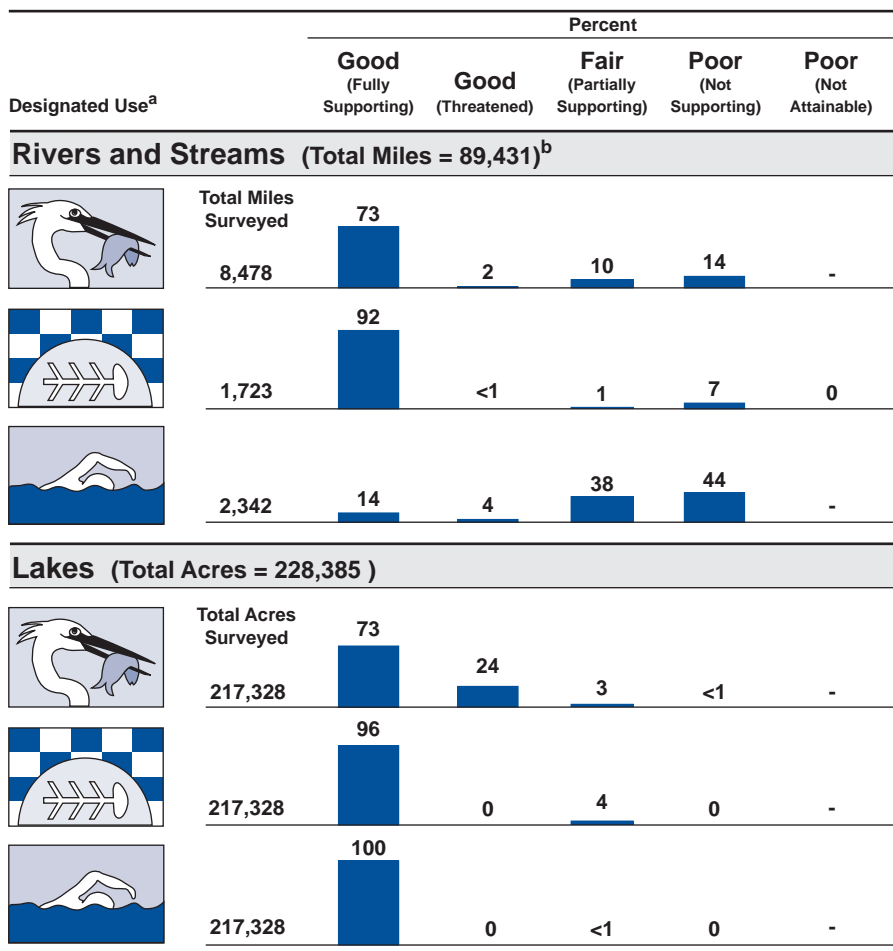
## Programs to Restore Water Quality

Construction grants, State revolving loan fund monies, and other funding programs have provided more than \$53 million for the construction of 23 wastewater projects that came on line 1994 to 1995. These projects either replaced outdated or inadequate treatment facilities or provided centralized treatment for the first time. Kentucky requires toxicity testing of point source discharges and permits for stormwater outfalls and combined sewer overflows. The non-point source program oversees projects addressing watershed remediation, education, training, technical assistance, and evaluation of best management practices.

## Programs to Assess Water Quality

Kentucky sampled 44 ambient monitoring stations characterizing about 1,432 stream miles during the reporting period. The State performed biological sampling at 25 of these stations. Thirteen lakes were sampled to detect eutrophication trends. The State also performed 17 intensive studies to evaluate point source and nonpoint source impacts, establish baseline water quality measurements, and reevaluate water quality in several streams.

## Individual Use Support in Kentucky



- Not reported in a quantifiable format or unknown.

<sup>a</sup> A subset of Kentucky's designated uses appear in this figure. Refer to the State's 305(b) report for a full description of the State's uses.

<sup>b</sup> Includes nonperennial streams that dry up and do not flow all year.

Note: Figures may not add to 100% due to rounding.